Focus on Water Availability



Water Resources Program

Revised December 2012

Elwha-Dungeness Watershed, WRIA 18

This focus sheet provides information on the availability of water for new uses in the Elwha-Dungeness Watershed. It provides a starting point for potential water users to determine the best strategies for securing water for a future project or proposal in this area.

Although there is a common perception that it rains a lot in western Washington, this is not true everywhere. The Dungeness River watershed lies in the rain shadow of the Olympic Mountains and receives much less rain than most of Puget Sound. To the west, the Elwha River watershed is also affected, but to a much lesser extent. Increasing demands for water and dry skies in summer mean stream flows at certain times of the year may not be enough to meet all needs of people and the environment.

Annual precipitation ranges from 15 inches in the Sequim area, 30-40 inches around Port Angeles, to more than 120 inches at each river's headwaters in the Olympic Mountains. These two rivers are fed by melting snowpack in spring and early summer, but later summer and fall flows rely on water moving from groundwater to surface water (from aquifers to streams). Most small streams are fed by winter rains and snow, relying on groundwater inflow at other seasons.

The two very different drainages of the Elwha and Dungeness Rivers, their tributaries, and streams draining directly to the Strait of Juan de Fuca make up Water Resource Inventory Area (WRIA) 18.

Both the Elwha and Dungeness Rivers are significant salmon-bearing rivers, with multiple fish species listed as threatened under the federal Endangered Species Act (ESA). Chinook salmon migrate upriver to spawn in August and September, and low flows at that time can create physical barriers and reduce spawning area. Steelhead, which are found in several smaller Elwha-Dungeness area streams as well as the rivers, have also recently been listed for protection under the ESA. Adequate stream flow levels are a critical part of river health, water quality, and fish habitat.

In the Dungeness watershed, most development occurs in the low-lying lands and foothills and takes advantage of multiple aquifers and senior water rights. The Port Angeles area sits on bedrock and is bordered by the Olympic Mountains. The City holds substantial water rights from



DEFINITIONS

Adjudication: A legal process conducted through a superior court to determine the extent and validity of existing water rights.

Aquifer: An underground layer of sand and gravel that acts as a reservoir for groundwater.

Instream flows: Flow levels adopted into an administrative rule that create a water right for the stream to protect fish, wildlife, stock watering, recreational uses, and other instream uses and values.

Mitigation: Offsetting the impacts of a proposed water use on area streams.

Seawater intrusion: The movement of salt water into freshwater aquifers.

Surface water source limitation: A recommendation from the Department of Fish and Wildlife that flows be protected to maintain fish populations. See RCW 77.57.020.

the mainstem Elwha River and shallow aquifer, while residents outside the City make use of numerous smaller water systems and individual wells.

Irrigation and farming became well established over a century ago on the broad plain around Sequim. The community has expanded significantly in the past decades with an influx of sun-seeking retirees. Although maintaining farming as a major part of the economy is a very important goal of the local community and the Department of Ecology (Ecology), some former farmlands have been converted to residential areas.

In 2005, the Clallam County Board of Commissioners unanimously adopted the locally developed Elwha-Dungeness Watershed Plan, which obligated the Department of Ecology (Ecology) to develop a water management rule. A rule for the Dungeness watershed was adopted in November 2012. A rule for the Elwha is on hold, pending re-stabilization of the Elwha River subsequent to dam removal.

Due to large irrigation rights from the Dungeness River, substantial municipal water rights from the Elwha River, other rights for public water supplies and industrial uses, and fish needs for adequate stream flows, much of the water in the Elwha-Dungeness watershed is already legally spoken for (in the form of existing water rights). Population growth, low summer/early fall stream flows, and precipitation patterns that appear to be changing add to the challenge of finding new year-round water supplies.

Factors affecting water availability and options for securing water in the Dungeness watershed (East WRIA 18)

Chapter 173-518 WAC: Water Resources Management Program for the Dungeness portion of the Elwha-Dungeness Water Resource Inventory Area (WRIA) 18

The new water management rule for the Dungeness watershed (Chapter 173-518 WAC) is effective as of January 2, 2013. The rule established instream flows for the Dungeness River, and Bagley, Bell, Cassalery, Gierin, Matriotti, McDonald, Meadowbrook and Siebert Creeks. The creeks are now closed to new uses, and the Dungeness River is seasonally closed to new uses from July 15 to November 15, when flows are low.

The rule has provisions for getting water for new uses after the rule is effective; it does <u>not</u> stop development. The intent of the rule is to manage water so that there is both protection of the environment and water for continued development. To help ensure both, an important rule element is to require that the impact of all new water uses on area streams be mitigated (offset or compensated for). A water bank, called the Dungeness Water Exchange, will simplify the process for new water users to obtain "mitigation credits" to offset their proposed use. You can also propose your own mitigation plan.

• See http://www.ecy.wa.gov/programs/wr/instream-flows/dungeness.html for more information on the rule, including a copy of the rule language.

Senior water rights trump new uses

In 1924, the Clallam County Superior Court settled rights to divert water from the Dungeness River, in a general adjudication of surface water rights. The nine original irrigation companies and districts still hold significant rights to water from the Dungeness River, even though the water rights affirmed are often

higher than the natural flows recorded in the Dungeness River over the past eighty or more years. Farmers' irrigation practices and acreage have lessened over the decades. Ecology is in the process of issuing new water right certificates that more accurately reflect water use by the irrigators.

Ecology and the irrigation districts and companies that hold irrigation rights from the Dungeness River, signed a Memorandum of Understanding (MOU) in 2012. The MOU allows irrigation of up to 7,000 acres in the Dungeness watershed, manages diversions during low flow periods, and provides irrigators with clarity on the use of their trust water rights.

Other water availability information for the Dungeness

Declining groundwater levels are a concern in some areas of the Dungeness watershed. Careful management to protect groundwater quality and quantity is important to the watershed's overall water supply. Some areas adjacent to the Strait of Juan de Fuca have the potential for seawater intrusion.

The Elwha-Dungeness watershed is one of 16 identified in the Statewide Salmon Recovery Strategy in which low stream flows are known to limit salmon populations and impair fish habitat and use. The Jamestown S'Klallam and Lower Elwha Klallam Indian Tribes are very concerned about maintaining flows and fish habitat in the watershed. Applications for water rights and mitigation plans are routinely sent to the Tribes for their review, as well as the state Department of Fish and Wildlife.

Because late summer is often the hardest time to meet demands for water both in and out of streams and rivers, discussions of ways to stretch water supplies focus on that period. Both short- and long-term strategies are being evaluated. In the Dungeness, small-scale storage is being discussed which could take several forms: small reservoirs, recharge of groundwater using high winter or spring flows, or rainwater catchments or cisterns. Transfers from existing water users have provided water for new uses in other Washington watersheds and might be an option in the Dungeness.

Now that a rule is in place, options exist for processing applications for new water rights or changes to existing ones. Applicants will need to secure mitigation water to offset any impacts their water use will have on area streams.

Water availability in the Elwha watershed (West WRIA 18)

Measures to protect fish habitat

The Elwha-Dungeness Watershed Plan lists closures and restrictions known as Surface Water Source Limitations (SWSLs), recommended by the Department of Fish and Wildlife to Ecology. These either prohibit new uses or become conditions of use on water rights. If a stream, spring or lake is restricted under SWSL, connected groundwater is affected as well, and the water right holder must stop diverting water to meet SWSL conditions.

Most SWSL restrictions went into effect several years ago. SWSLs affecting Dungeness streams were evaluated as part of Dungeness water management rule development. SWSLs in the Elwha watershed can be revisited when a rule is developed for that watershed, but currently stand as follows:

One creek basin is identified by SWSL as being closed to new uses:

• Dry Creek

Five river and creek basins are identified by SWSL as requiring restrictions on new uses:

- Lake Creek
- Lees Creek
- Morse Creek
- Peabody Creek
- Tumwater Creek.

Water supply for new uses in the Elwha watershed

The fastest and simplest option for obtaining water for a new home or project is to connect to an established water supplier.

The statutory groundwater permit exemption allows certain users of small quantities of groundwater (most commonly single residential well owners) to construct wells and develop their water supplies without filing an application or obtaining a water right permit from Ecology. For more information about the groundwater permit exemption, refer to http://www.ecy.wa.gov/pubs/fwr92104.pdf.

Applications for new water rights in the Elwha-Dungeness watershed have been on hold as water management issues have been examined and ways of securing water for new projects are being established. The rule for the Elwha is on hold pending re-stabilization of the Elwha River subsequent to dam removal. Once established, the rule will apply to all new uses of water and provide mechanisms for their approval.

Pending water right applications in the Elwha-Dungeness watershed

Washington water law is based on the "prior appropriation" system, often called "first in time, first in right." Applications for water from the same source must be processed in the order they are received.

Ecology asks anyone who needs a water right (new, change, or transfer) to submit the pre-application consultation form and meet with us to review your water supply needs and project proposal.

- Apply for a New Water Right http://www.ecy.wa.gov/programs/wr/rights/newrights.html
- Apply to Change or Transfer a Water Right or Claim http://www.ecy.wa.gov/programs/wr/rights/change_transfer_use.html

An approach commonly used for work on new applications is processing through Ecology's Cost Reimbursement Program. (Refer to www.ecy.wa.gov/pubs/0511016.pdf.) For more information on this and other options, refer to "Alternatives for Water Right Application Processing" http://www.ecy.wa.gov/pubs/1111067.pdf

The map on page six shows some of the factors that will be considered when evaluating water right permit applications. Here are some additional information sources to assist you with your research:

- Locate and research water rights on land parcels anywhere in the state (Water Resource Explorer) http://www.ecy.wa.gov/programs/wr/info/webmap.html
- Pending Water Right Applications by County http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html
- Subscribe to a water right application RSS feed for a county or WRIA http://www.ecy.wa.gov/programs/wr/rights/wr_app_rss.html
- WRIA map showing the total number of water right claims, certificates, permits and applications http://www.ecy.wa.gov/programs/wr/rights/Images/pdf/waterright-wria-maps.pdf
- Search and view well reports using a variety of search tools
 https://fortress.wa.gov/ecy/waterresources/map/WCLSWebMap/default.aspx

For more information

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